# TBD06 – (Part 06) ****Hormones****

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. B.6.1 **Outline** the production and function of hormones in the body. (2) Hormones are chemical messengers. They are secreted directly into the blood by endocrine glands. Examples include ADH, aldosterone, estrogen, progesterone and testosterone, insulin, epinephrine (adrenaline) and thyroxine.
   1. What is a hormone and where does it come from?
   2. Label the important parts of the endocrine system on the following steroid induced meathead:
   3. List a few hormones and their functions:
   4. Explain (possibly with a diagram) the difference between the two types of hormones (protein or steroid)

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| --- | --- | --- |
|  | **Steroids** | **Peptides** |
| **Description** |  |  |
| **Diagram** |  |  |

1. B.6.2 **Compare** the structures of cholesterol and the sex hormones. (3) Stress the common steroid backbone but the difference in functional groups.
   1. Complete the following table

|  |  |  |
| --- | --- | --- |
|  | **Cholesterol** | **Sex Hormones** |
| **Description/Function/Origin** |  |  |
| **Structure** |  |  |

1. B.6.3 **Describe** the mode of action of oral contraceptives. (2) Aim 8
   1. What does FSH and LH stand for?
      1. FSH
      2. LH
   2. Starting with the pituitary gland and completing with menstruation or conception, explain process of the hormones (FSH and LH) and their control of the female reproductive system:
   3. There is another method that regulates the hormone progesterone, briefly explain:
   4. In general, explain how oral contraceptives “trick” the female body:
2. B.6.4 **Outline** the use and abuse of steroids. (2) Aim 8
   1. Where is testosterone produced?
   2. What is testosterone responsible for?
   3. Explain why the Nazi attempt to dope their soldiers did not work:
   4. How can testosterone be modified to resist being broken down and flushed out?
   5. What is an anabolic steroid, how is it different than testosterone?
   6. What are the effects of anabolic steroids on the body?
      1. On Men
      2. On Women
   7. What are the therapeutic benefits of anabolic steroids?